

## CLAIMS

1<sup>st</sup>.- Stone-cutting without the high-pitched noise, when the cutting process is carried out using metallic grit, which is currently used in the proportion of 120 to 190 g/litre of sludge and with a grain size of 1 to 0.4 mm, spherical or angular, with progress that is less than or equal to 18/IDA cm/h, causing a strong, high-pitched noise of more than 80 db at 1.5m, characterised by the fact of using the smallest size of grit as economically possible and because the grit concentration in the sludge is the highest possible, and also characterised by the fact that the highest progress possible in order that the cutting may be carried out without any high-pitched noise is adopted, with a sound level lower than 80db at 1.5m and low in pitch.

2<sup>nd</sup>.- Stone-cutting without the high-pitched noise, as described in the 1<sup>st</sup> claim, characterised by the fact that the maximum size of the grit used to cut the stones that are the most difficult to cut, i.e., indices 4 and 5, is 500 µm; for stones with a difficulty level of 3, such as Rosa Porriño stone, the maximum size is 600 µm and for stones of indices 1 and 2, the maximum size is 700 µm.

3<sup>rd</sup>.- Stone-cutting without the high-pitched noise as described in the 1<sup>st</sup> and 2<sup>nd</sup> claims, characterised by the fact that the actual grit content in the sludge that enters the machine, of a size between the maximum and 40% of the maximum, is higher than 210g per litre.

4<sup>th</sup>.- Stone-cutting without the high-pitched noise as described in the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> claims, characterised by the fact that the optimum content of grit in the sludge and the highest progress that is convenient for the cutting to be carried out without generating high-pitched noise and without the sound level exceeding 80db at 1.5m will be established in experiments for each type of

machine, each size, thickness and tension of the strips, for each size of grit and for each stone and stone length.